

REMARKS

Claims 36-52 will be pending upon entry of the present amendments. Claims 1-35 have been canceled without prejudice. The amendments are supported throughout the specification, particularly from pages 10-12 and in the Examples. No new matter has been added. Applicant respectfully requests allowance of the amended claims in view of the remarks herein.

Rejections under 35 U.S.C. § 103(a)

Claims 1-3, 10-11 and 13-22 are rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Davis-Ward, WO 2004/074244. These claims have been canceled, rendering the rejection moot as to these claims. Applicant addresses the rejection in view of claims 36-52, which are drawn to compounds of Formula (I), wherein:

R³ is C₁-C₈alkylsulfinyl, C₁-C₈alkylsulfonyl, C₅-C₁₀arylsulfonyl, or unsubstituted or substituted carbamoyl;

R⁵ is chloro or bromo;

R⁶ is hydrogen;

R⁸ is C₅-C₁₀aryl; unsubstituted or substituted 5 or 6 membered heterocyclyl comprising 1 or 2 hetero atoms selected from N, O and S; C₅-C₁₀aryloxy; unsubstituted or substituted heterocyclyloxy; or unsubstituted or substituted heterocyclylC₁-C₈alkoxy; and

R¹⁰ is C₁-C₈alkyl, haloC₁-C₈alkyl, C₁-C₈alkoxy, unsubstituted or substituted heterocyclylC₁-C₈alkoxy, unsubstituted or substituted amino, or halogen.

In *Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350 (Fed. Cir. 2007), the Court clarified that in order to find a prima facie case of unpatentability, “a showing that the ‘prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention’ was also required.” *Id.* at 1356. The Court further held in *Takeda*, “Thus in cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish a prima facie obviousness of a new claimed compound.”

The CAFC has further elucidated the obviousness factors for chemical structures in *Eisai v. Dr. Reddy's Laboratories* (533 F.3d 1353) (Fed. Cir. 2008). The CAFC discussed the *Graham* factors in new chemical composition cases, stating, “Post-KSR, a prima facie

case of obviousness for a chemical compound still, in general, begins with the reasoned identification of a lead compound.” It is therefore necessary that in order to establish a prima facie case of obviousness for a chemical composition of matter, a lead compound must be identified from the prior art, as well as a showing that the prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention. In the present case, the Examiner fails to identify a teaching in the art to make the modifications to arrive at the claimed invention. The Examiner also has not suggested any reason why one of skill in the art would make the modifications necessary to arrive at the presently claimed compounds.

However, the Examiner alleges that “[i]t has been held that a prior art disclosed genus of useful compounds is sufficient to render prima facie obvious a species falling within a genus”; and relies upon *In re Susi*, 440 F.2d 442 and *Merck & Co. v. Biocraft Laboratories* (“*Merck v. Biocraft*”), 874 F.2d 804 to support this assertion. Applicant respectfully disagrees. Neither *In re Susi* nor *Merck v. Biocraft* deals with new chemical compounds, but rather involves a combination or formulation composition; thus, *In re Susi* and *Merck v. Biocraft* are factually distinguishable from the present case.

In re Susi involves an appeal of the Patent Office Board of Appeals’ decision affirming the examiner’s rejection of claims 2-13 in application serial no. 389,210, filed August 12, 1964. Claims 2-5 are process claims, and claims 6-13 are composition of matter claims. Claim 6, the broadest of the composition claims reads as follows:

6. The composition of a polymer selected from the group consisting of polyvinylchloride, polyvinylidene chloride, polymethylacrylate, polymethylmethacrylate, polystyrene, melamines, polyesters and polyolefins and 0.01 to 2 weight percent of a compound of the formula [Graphic omitted and R variables omitted].

“The arguments for patentability have been predicated solely on the additives, and not on the specific plastics to which they are added.” (*In re Susi*, 440 F.2d 442, 443).

In *Merck v. Biocraft*, Biocraft appealed the validity of U.S. patent no. 3,781,430. The parties agreed that all of the claims stand or fall with claims 2 and 3. Claims 1-3 reads as follows:

1. A composition for oral administration comprising amiloride hydrochloride and hydrochlorothiazide, wherein the ratio of amiloride hydrochloride to hydrochlorothiazide ranges from about 1:1 to 1:10 by weight of the composition.

2. A composition according to claim 1 wherein amiloride hydrochloride and hydrochlorothiazide are combined at a ratio of 1 to 10 by weight.

3. A composition for oral administration which comprises 5 mg. of amiloride hydrochloride and 50 mg. of hydrochlorothiazide.

The claims were found to be obvious under U.S. patent no. 3,313,813 ('813), which discloses various (3-amino-5,6-disubstituted-pyrazinoyl) guanidines, one of which is amiloride. Moreover, the '813 patent teaches that guanidines "are useful in combination with other classes of diuretic agents to prevent the loss of potassium which the other diuretics otherwise would cause to be eliminated." Hydrochlorothiazide is identified as an example of a potassium excreting diuretic with which the claimed compounds can be combined. (*Merck v. Biocraft*, 874 F.2d 804 at 806.

Furthermore, contrary to the Examiner's assertion, the claimed compounds are not positional isomers of the reference compounds (Office Action, page 4). In the present case, none of the compounds described in WO 2004/074244 teaches or suggests the claimed invention. Thus, Applicant submits that new claims 36-52 are non-obvious, and respectfully requests withdrawal of this rejection in view of claims 36-52.

Obviousness-type Double Patenting

Claims 1-11, 13-15 and 21-24 are also rejected under a provisional obviousness-type double patenting, as allegedly being unpatentable over claims 23-42 of co-pending application no. 10/568,367. These claims have been canceled, rendering the rejection moot as to these claims. Applicant addresses the rejection in view of claims 36-52. As this is a provisional obviousness-type double patenting rejection, Applicant respectfully requests that this rejection be held in abeyance until the claims have been found allowable, at which time the guidelines of MPEP § 804 will be followed.

Conclusion

In view of the foregoing, Applicant submits that pending claims 36-52 are now allowable. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at 858-812-1539.

In the event that the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-1885** referencing docket No. PAT032910A-US-PCT.

Respectfully submitted,
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